Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. – 20. (Cancelled)

21. (Currently amended) A method of enhancing ~~an immune~~ a cytotoxic T-lymphocyte response in an organism to ~~a~~ tumor ~~antigen~~ cells which express low to non-detectable levels of peptide/MHC class 1 complexes on the cell surface, comprising:

administering ~~an effective amount of an agent that can augment the level of a Tap-1 molecule in a target cell bearing the tumor antigen to a cell or animal in need thereof,~~

~~wherein the agent is a vector comprising~~ *ex vivo* a nucleic acid sequence encoding ~~the~~ a TAP-1 molecule into said tumor cells;

irradiating said tumor cells; and

introducing said tumor cells containing Tap-1 nucleic acid sequences into said organism.

~~wherein the vector is capable of transforming the target cell so that the expression of Tap-1 is increased and the immune response to the tumor antigen is also enhanced.~~

22-24. (Cancelled)

25. (Currently amended) The method according to claim 21, wherein the ~~animal~~ organism is also subjected to surgery, radiation, chemotherapy, immunotherapy or photodynamic therapy.

26. (Currently amended) The method according to claim 21, wherein ~~the agent is administered~~ said introducing step is performed intraperitoneally, intratumorally, subcutaneously, intravenously, orally, mucosally, submucosally or intradermally.

27. (Cancelled)

28. (Previously presented) The method according to claim ~~27~~ 31 wherein the viral vector is selected from the group consisting of vaccinia based vectors, adenovirus based vectors, lenti virus based vectors and HSV based vectors.

29. – 30. (Cancelled)

31. (New) A method of enhancing a cytotoxic T-lymphocyte response in an organism to tumor cells which express low to non-detectable levels of peptide/MHC class 1 complexes on the cell surface, comprising:

introducing into the organism, at a location into or near the tumor cell a viral vector encoding a TAP-1 molecule into in a manner which causes uptake by said tumor cells of said viral vector, resulting in the expression of TAP-1 in said tumor cells.

32. (New) The method according to claim 21, wherein said nucleic acid sequence encodes both the TAP-1 molecule and TAP-2 molecule.

33. (New) The method according to claim 31, wherein said viral vector encodes both the TAP-1 molecule and TAP-2 molecule.

34. (New) A method of enhancing a cytotoxic T-lymphocyte response in an organism to tumor cells which express low to non-detectable levels of peptide/MHC class 1 complexes on the cell surface, comprising:

introducing into the organism, at a location into or near the tumor cell a plasmid vector encoding a TAP-1 molecule into in a manner which causes uptake by said tumor cells of said plasmid vector, resulting in the expression of TAP-1 in said tumor cells.

35. (New) The method according to claim 31, wherein said plasmid vector encodes both the TAP-1 and TAP-2 molecule.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. – 20 (Cancelled)

21. (Currently amended) A method of enhancing a cytotoxic T-lymphocyte response in an ~~organism~~ animal to tumor cells which express low to non-detectable levels of peptide/MHC class 1 complexes on the cell surface, comprising:

administering *ex vivo* a nucleic acid sequence encoding a TAP-1 molecule into said tumor cells;

irradiating said tumor cells; and

introducing said tumor cells containing TAP-1 nucleic acid sequences into said ~~organism~~ animal.

22. – 24. (Cancelled)

25. (Currently amended) The method according to claim 21, wherein the ~~organism~~ animal is also subjected to surgery, radiation, chemotherapy, immunotherapy or photodynamic therapy.

26. (Previously presented) The method according to claim 21, wherein said introducing step is performed intraperitoneally, intratumorally, subcutaneously, intravenously, orally, mucosally, submucosally or intradermally.

27. (Cancelled)

28. (Previously presented) The method according to claim 31 wherein the viral vector is selected from the group consisting of vaccinia based vectors, adenovirus based vectors, lenti virus based vectors and HSV based vectors.

29. – 30. (Cancelled)

31. (Currently amended) A method of enhancing a cytotoxic T-lymphocyte response in an ~~organism~~ animal to tumor cells which express low to non-detectable levels of peptide/MHC class 1 complexes on the cell surface comprising:

introducing into the ~~organism~~ animal, at a location into or near the tumor cell a viral vector encoding a TAP-1 molecule into in a manner which causes uptake by said tumor cells of said viral vector, resulting in the expression of TAP-1 in said tumor cells.

32. (Previously presented) The method according to claim 21, wherein said nucleic acid sequence encodes both the TAP-1 molecule and a TAP-2 molecule.

33. (Previously presented) The method according to claim 31, wherein said viral vector encodes both the TAP-1 molecule and a TAP-2 molecule.

34. (Currently amended) A method of enhancing a cytotoxic T-lymphocyte response in an ~~organism~~ animal to tumor cells which express low to non-detectable levels of peptide/MHC class 1 complexes on the cell surface, comprising:

introducing into the ~~organism~~ animal, at a location into or near the tumor cell a plasmid vector encoding a TAP-1 molecule into in a manner which causes uptake by said tumor cells of said plasmid vector, resulting in the expression of TAP-1 in said tumor cells.

35. (Previously presented) The method according to claim 31, wherein said plasmid vector encodes both the TAP-1 molecule and a TAP-2 molecule.